

# Transcultural Journal of Humanities & Social Sciences

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Interdisciplinary & transcultural topics in Humanities  
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# TJHSS

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**Transcultural Journal for Humanities and Social Sciences (TJHSS)** is a journal committed to disseminate a new range of interdisciplinary and transcultural topics in Humanities and social sciences. It is an open access, peer reviewed and refereed journal, published by Badr University in Cairo, BUC, to provide original and updated knowledge platform of international scholars interested in multi-inter disciplinary researches in all languages and from the widest range of world cultures. It's an online academic journal that offers print on demand services.

**TJHSS Aims and Objectives:**

To promote interdisciplinary studies in the fields of Languages, Humanities and Social Sciences and provide a reliable academically trusted and approved venue of publishing Language and culture research.

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تحية طيبة وبعد ،،،

تتقدم إليكم جامعة بدر بالقاهرة بالشكر على ما تبذلونه من جهد مادي ومعنوي لإصدار المجلة،  
فتميزكم المشهود خير قدوة، ممتنين لعملكم الدؤوب وتفوقكم الباهر، ونتمنى لكم المزيد من  
النجاحات المستقبلية.

تحريراً في يوم الأربعاء الموافق 2024/08/07.

رئيس مجلس الأمناء

د/ حسن القلا



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Editorial:

## **Embracing Diversity and Inclusion in the Age of Digital Humanity**



The Third International Conference hosted by the School of Linguistics and Translation at Badr University in Cairo, titled “Diversity and Inclusion in the Age of Digital Humanity”, marked a significant milestone in the ongoing dialogue about the intersection of technology, language, and humanistic values. Held on October 26–27, 2024, the conference brought together scholars, researchers, and activists from around the world to explore how digital advancements can foster inclusivity while addressing the challenges posed by rapid technological evolution.

### **The Digital Transformation of Humanities**

One of the central themes of the conference was the imperative for digital transformation in humanities disciplines. Keynote speaker Professor Ruslan Mitkov’s presentation, “Language and Translation Technologies in the Artificial Intelligence Era”, underscored the transformative potential of Natural Language Processing (NLP) and AI in translation and linguistics. Mitkov highlighted the evolution from rule-based systems to generative AI, emphasizing both the capabilities and limitations of Large Language Models (LLMs). His insights reinforced the idea that while AI can enhance efficiency, human expertise remains indispensable in navigating linguistic nuances, ambiguity, and cultural context.

The conference also addressed the need for integrating computational linguistics into academic curricula. Recommendations included developing undergraduate and postgraduate programs in digital humanities, equipping students with skills for emerging roles like AI translators and prompt engineers, and promoting bias-free AI technologies. These measures are critical to preparing future generations for a labor market increasingly shaped by AI.

## **Diversity and Inclusion in Digital Spaces**

Another focal point was the role of digital platforms in promoting diversity and inclusion. Discussions highlighted the importance of creating safe digital environments for marginalized groups and minorities, as well as the ethical responsibilities of AI developers to mitigate biases in data and algorithms. Professor Sameh El Ansary's presentation on corpus-based language teaching exemplified how empirical approaches, such as using real-life language data, can bridge gaps in traditional pedagogy and foster more inclusive learning experiences.

The participation of researchers from diverse linguistic and cultural backgrounds—with 57 papers presented in multiple languages, most of them published in this issue—further demonstrated the conference's commitment to inclusivity. The inclusion of voices like Italian poet Domenico Pisana (we publish in this issue his valuable lecture), and scholars specializing in underrepresented languages underscored the value of cultural and linguistic diversity in academic discourse.

### **Charting a Path Forward:**

The conference concluded with a call for continuous monitoring of AI developments, ethical AI practices, and interdisciplinary collaboration to ensure technology's role as a tool for empowerment. Professor Zain A. Hady's article, "The Internet from the Age of Innocence to the Age of Decadence: A Study in the Digital Postcolonialism," furthered the discussion on the societal impacts of digital evolution. The imperative to safeguard humanistic values while embracing AI's potential was underscored.

The insights from this conference serve as a crucial reminder that the digital age must be guided by principles of diversity, inclusion, and human oversight. By aligning technological advancements with equity, we can build a future that authentically reflects the richness of our global community. The success of this conference reaffirms academia's vital role in shaping inclusive digital landscapes, urging us to carry forward its lessons and ensure technological progress aligns with understanding, respect, and inclusion.

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## Translation and Technology

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### 1. Introduction

#### 1.1. Context of the Study

**Translation**, the process of converting text or speech from one language to another, has existed for centuries. In the past, it required the linguistic skills and cultural knowledge of human translators. However, with the advent of technology, the translation process has evolved, leading to the development of sophisticated tools that assist or even automate certain aspects of translation. The rise of Machine Translation (MT) and Computer-Assisted Translation (CAT) technologies has fundamentally changed how translations are produced.

TRANSLATION TECHNOLOGY IS A RAPIDLY EVOLVING FIELD THAT INVOLVES THE USE OF COMPUTER SOFTWARE AND OTHER TOOLS TO SUPPORT THE TRANSLATION PROCESS. TRANSLATION TECHNOLOGY REFERS TO THE SET OF TOOLS AND TECHNIQUES THAT AID IN THE TRANSLATION PROCESS, EITHER PARTIALLY OR FULLY AUTOMATING IT. THESE TECHNOLOGIES LEVERAGE ADVANCEMENTS IN COMPUTING, LINGUISTICS, AND ARTIFICIAL INTELLIGENCE TO ENHANCE THE EFFICIENCY AND ACCURACY OF TRANSLATION (MUNDAY,2016).

MACHINE TRANSLATION (MT) AND COMPUTER-AIDED TECHNOLOGY TOOLS (CAT TOOLS) ARE TWO COMMON APPROACHES TO LANGUAGE TRANSLATION. WITH MACHINE TRANSLATION, THE TRANSLATION IS MAINLY AUTOMATED, WHILE WITH COMPUTER- AIDED TECHNOLOGY, THE TRANSLATION IS CREATED BY A HUMAN TRANSLATOR WITH SOME ASPECTS OF THE PROCESS AIDED BY SOFTWARE. **MACHINE TRANSLATION (MT)**: AUTOMATED TRANSLATION PERFORMED BY COMPUTER SOFTWARE, WHICH USES ALGORITHMS TO CONVERT ONE LANGUAGE INTO ANOTHER WITHOUT HUMAN INTERVENTION. POPULAR EXAMPLES INCLUDE GOOGLE TRANSLATE, DEEPL, AND MICROSOFT TRANSLATOR (HUTCHINS &SOMERS,1992)

**Computer-Assisted Translation (CAT)**: Tools that assist human translators in their work by providing various forms of support, such as translation memory (TM), terminology databases, and automatic suggestions. Examples of CAT tools include SDL Trados Studio, MemoQ, and Wordfast. **CAT tools** provide a range of features to help translators convert the meaning of a text from one language into another consistently and with speed. Modern CAT tools take a hybrid approach that enables

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translators and translation project managers to work seamlessly online or offline, using desktop tools or browsers (Bowker & Pearson, 2002).

**Speech Recognition and Synthesis** are technologies that convert spoken language into written text (speech-to-text) or generate spoken translations from written text (text-to-speech). **Neural Machine Translation (NMT)** is an advanced form of machine translation that uses deep learning and artificial neural networks to improve translation quality by understanding context and nuances better than traditional rule-based systems (Sutskever, Vinyals, & le, 2014).

**Artificial Intelligence (AI)** is transforming the landscape, offering powerful tools that enhance the speed and accessibility of translations. Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think, learn, and perform tasks that typically require human cognition. The concept involves creating systems that can interpret data, recognize patterns, make decisions, and improve over time.

Translation technology aims to streamline the translation process, improve consistency, reduce costs, and handle large volumes of text quickly. This research paper delves into these technologies, their applications, benefits, and challenges, and examines the potential for artificial intelligence (AI) and CAT tools to surpass human intelligence in translation tasks.

## **1.2. Objectives of the Study**

This study aims to critically assess the capabilities and limitations of machine translation, explore the functionalities and advantages of CAT tools and most importantly, the potential of Artificial Intelligence (AI) like ChatGPT to complement human translators in post-editing tasks while addressing the challenges related to quality assurance and job displacement within the translation industry. Additionally, the research aims to determine whether AI and CAT tools can surpass human intelligence in translation tasks or if human involvement remains crucial for maintaining cultural and contextual accuracy.

## **1.3. Research Questions**

This research paper attempts to answer the following questions:

1. What is the concept of translation technology?
2. What is the difference between machine translation and computer-aided technology?
3. What are the pros and cons of translation technology?
4. Can Artificial Intelligence (AI) and CAT tools surpass Human Intelligence?

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## 2. LITERATURE REVIEW

The intersection of translation and technology has attracted significant academic attention in recent years, with scholars examining both the evolution of translation tools and their implications for the translation industry. This literature review synthesizes key studies on machine translation (MT), computer-assisted translation (CAT), the role of artificial intelligence (AI) in translation, and the broader impact of technology on the translation profession.

### 2.1. MACHINE TRANSLATION (MT) AND ITS EVOLUTION

Machine translation (MT) has a long history, with the first experiments dating back to the 1950s, when early systems aimed to provide a rudimentary form of automatic translation (Hutchins, 1992). Over time, MT technology has evolved through several phases, beginning with **rule-based machine translation (RBMT)**, which used predefined linguistic rules and bilingual dictionaries to map sentences from one language to another. However, this approach struggled with issues related to linguistic ambiguity and the difficulty of encoding all the complexities of natural language (Somers, 2003).

The 1990s saw the rise of **statistical machine translation (SMT)**, which replaced rules with statistical models derived from large corpora of bilingual texts. This marked a significant improvement in translation quality, especially for less predictable language pairs. SMT allowed for the use of probabilistic models to select the most likely translation for a given sentence based on observed patterns in the training data (Koehn, 2009). Yet, despite its advantages in producing fluent translations, SMT systems often faced challenges with maintaining contextual coherence and dealing with idiomatic expressions (Koehn, 2017).

In recent years, **neural machine translation (NMT)** has revolutionized the field by using deep learning techniques and artificial neural networks to process and generate translations. NMT systems, such as Google Translate and DeepL, have demonstrated superior fluency and context-awareness compared to previous approaches (Bahdanau et al., 2014). NMT systems, by leveraging vast amounts of parallel data and sophisticated algorithms, are capable of producing translations that are more accurate, contextually appropriate, and capable of handling nuances in meaning. Nonetheless, challenges remain, particularly in highly specialized domains and languages with limited training data (Edwards, 2019).

### 2.2. COMPUTER-ASSISTED TRANSLATION (CAT) TOOLS

While machine translation aims to automate the translation process entirely, **computer-assisted translation (CAT)** tools were designed to support human translators rather than replace them. CAT tools have become indispensable in professional translation workflows, particularly in the context of large-scale projects



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or projects requiring high consistency across translations (O'Brien, 2011). A key component of CAT tools is **translation memory (TM)**, which stores previously translated segments of text for reuse. By providing human translators with automatic suggestions based on previous translations, CAT tools improve efficiency and consistency, particularly in technical, legal, and scientific fields (Somers, 2003).

Other features of CAT tools include **terminology management** and the use of **automated quality assurance (QA)** tools, which help translators maintain consistency in terms and ensure the quality of translations across large projects (Bowker, 2002). These tools have been widely praised for their ability to reduce translation time and cost, while also ensuring that translations align with client-specific terminology and stylistic guidelines (Saldanha & O'Brien, 2013). However, as the literature indicates, CAT tools still require human oversight, especially in terms of selecting appropriate translations and ensuring that the final product meets the desired level of quality (Sato, 2020).

### *2.3. THE ROLE OF ARTIFICIAL INTELLIGENCE IN TRANSLATION*

The integration of **artificial intelligence (AI)** into translation technology has raised significant debates about its potential to surpass human translation capabilities. AI's role in translation is primarily seen in the development of neural machine translation (NMT) and the advent of **AI-powered CAT tools**, which promise to further enhance the productivity and accuracy of human translators (O'Brien, 2018). AI technologies, such as deep learning and natural language processing (NLP), allow translation systems to understand the underlying structure and meaning of sentences, improving translation quality and fluency.

Some studies argue that AI-powered systems could one day surpass human intelligence in specific translation tasks. For example, NMT systems can generate translations faster than human translators, and in some cases, they may outperform humans in certain types of general-purpose translations (Koehn, 2017). However, human intelligence remains essential for ensuring the cultural and emotional nuance of translations, particularly in specialized or creative domains such as literature, marketing, or audiovisual translation (Durovic & Delerue, 2020).

Moreover, AI's ability to handle highly specialized domains—such as medical or legal translation—remains limited. Despite substantial progress in developing domain-specific NMT systems, these systems still struggle with highly specialized terminology and the contextual complexities that human translators can navigate with ease (Edwards, 2019). The literature suggests that AI is best viewed as a complement to human expertise rather than a replacement for it.

### *2.4. IMPLICATIONS OF TRANSLATION TECHNOLOGY ON THE TRANSLATION PROFESSION*

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The growing reliance on translation technology has significant implications for the translation profession. On the one hand, the widespread use of MT and CAT tools has made translation more efficient and accessible, enabling companies and individuals to handle multilingual communication at scale. This is particularly evident in industries like e-commerce, tourism, and customer service, where the demand for quick, cost-effective translations has surged (Pym, 2014).

On the other hand, concerns have been raised about the potential displacement of human translators. The increasing sophistication of MT systems has led some scholars to question whether human translators will become obsolete in the future (Schäffner, 2004). However, most researchers agree that the future of translation will likely involve a hybrid model, where humans and machines collaborate to achieve the best possible results. While machines excel at handling repetitive, large-scale translation tasks, humans are indispensable when it comes to ensuring the accuracy, creativity, and cultural sensitivity required in professional translations (O'Brien, 2018).

The ethical dimensions of translation technology also deserve attention. Issues such as data privacy, the potential bias embedded in training data, and the need for transparent AI algorithms are increasingly relevant in discussions of AI and translation. As scholars have noted, the ethical implications of AI-driven translation require careful consideration to ensure that these technologies serve humanity in a fair and equitable manner (Saldanha & O'Brien, 2013).

### 2.5. FUTURE DIRECTIONS

Looking ahead, the future of translation technology seems poised to integrate even more advanced AI capabilities, including **adaptive learning**, where systems continuously improve by learning from new data (Koehn, 2017). This could lead to highly specialized MT systems capable of handling complex, domain-specific translations with a high degree of accuracy. Additionally, the integration of AI with **natural language generation (NLG)** could result in systems that not only translate but also generate entirely new content in multiple languages, further enhancing the speed and reach of multilingual communication.

However, as the literature suggests, these advancements will likely lead to a more collaborative relationship between human translators and AI systems, where humans oversee the output of machines, ensuring that translations remain accurate, contextually appropriate, and culturally sensitive (Durovic & Delerue, 2020).

This literature review presents an overview of key research on translation technology, providing insights into the historical development of MT and CAT tools, the role of AI in translation, and the implications for the translation profession. The sources cited offer a mix of foundational and contemporary perspectives on these issues.

## 3. METHODOLOGY

This section outlines the approach taken to investigate the research questions posed in the paper, focusing on the comparison of machine translation (MT) and computer-assisted translation (CAT), the exploration of AI's role in translation, and the evaluation of the pros and cons of translation technologies. To that end, this study adopts a qualitative research methodology, combining literature review and comparative analysis of existing translation technologies, such as ChatGPT (one of the most famous AI tools).

In addition, the current methodology outlines the steps taken to investigate translation technology detailing the approach for evaluating the role of AI in surpassing human intelligence. It employs a qualitative analysis of ChatGPT's language responses to assess its performance in answering queries about linguistic forms and related language issues.

The following aspects outline the research methodology:

### **3.1. Data Collection**

A set of language-related queries, including those regarding the verb, noun, and adjective forms of words, as well as specific spelling variations across dialects (e.g., British vs. American English), will be collected from various user interactions with ChatGPT.

- The queries will be categorized into different linguistic categories, such as:
  - Verb forms (e.g., "What is the verb form of friend?")
  - Noun forms (e.g., "What is the noun form of symbolic?")
  - Language variations (e.g., British vs. American spellings).
  - Misunderstandings or errors in providing the correct linguistic form.

### **3.2. Analysis of Responses**

Each response from ChatGPT will be analyzed for:

- Accuracy: Whether the given linguistic form is correct (e.g., whether "befriend" is accurately identified as the verb form of "friend").
- Contextual Understanding: How well ChatGPT understands and explains the specific context, including regional variations in spelling or historical use.

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- Error Handling: If errors or omissions occur in the responses, how does ChatGPT address and correct them when pointed out (e.g., the correction of "Egyptize" as a valid term when previously omitted)?

### **3.3. User Interaction and Feedback**

- User corrections and clarifications will be tracked to evaluate how ChatGPT responds to feedback. This includes checking if ChatGPT improves the thoroughness or accuracy of its answers after receiving corrections (e.g., acknowledging the alternative spelling "connexion" in British English).

- Instances where ChatGPT apologizes for mistakes or gives incomplete answers will be recorded and analyzed for the quality of its responses after being pointed out by users.

### **3.4. Case Study of Multilingual Responses**

A subset of queries involving both English and Arabic language forms will be examined, such as the example about the plural and singular forms of Arabic words (e.g., "ما هو جمع طريقة؟"). This will assess ChatGPT's handling of linguistic variations and complexities across languages.

### **3.5. Comparative Analysis**

The study will compare the accuracy and completeness of ChatGPT's responses to similar queries with other available language models or linguistic resources, such as dictionaries or language databases, to benchmark its performance.

### **3.6. Data Interpretation and Conclusion**

The data from the analysis will be used to draw conclusions about the reliability, limitations, and strengths of ChatGPT in providing correct linguistic forms and addressing users' queries. The study will also highlight areas for potential improvement in how ChatGPT handles language-related issues, especially regarding user corrections and understanding complex language nuances.

By focusing on specific examples, such as word forms, regional variations, and misinterpretations, the methodology aims to provide a detailed assessment of ChatGPT's capabilities and limitations in linguistic processing.

## **4. Analysis**

### **4.1. MACHINE TRANSLATION (MT)**

Machine Translation is an entirely automated process in which a computer system generates translations without human involvement. MT relies on algorithms,

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statistical models, or neural networks to map text in one language to an equivalent in another language.

### **Key characteristics of MT:**

- Fully automatic process
- Ranges from rule-based systems (RBMT) to statistical models (SMT) and neural networks (NMT)
- Can translate large amounts of text quickly
- No human intervention or oversight during the translation process

**Popular examples:** Google Translate, DeepL, and Amazon Translate.

## **4.2. CAT Tools**

The main function of a CAT tool is to save the translation units in a database, called translation memory (TM), so that they can be re-used for any other text, or even in the same text. It stores previously translated segments, improving efficiency and consistency in translation.

### **Key characteristics of CAT:**

- Human translator is still central to the process
- Tools provide suggestions, but translators make final decisions
- Uses resources like translation memories (TM) and glossaries to ensure consistency and improve productivity
- Can significantly speed up the process, especially for repetitive content

\* Other key functions include:

1. Terminology Management: Allows users to create and maintain glossaries to ensure consistent use of specific terms across projects.
2. Segmenting Text: Breaks down text into manageable segments.
3. Bilingual Editing: Displays source and target texts side by side.
4. Reporting and Analysis: Generates reports on translation progress, word counts and other metrics.

### **4.2.1. Most Common CAT Tools**

**Trados**, primarily known as SDL Trados Studio, is one of the most common CAT tool. It is used by 43.2% of users all over the world. Trados is popular among freelancers and agencies for its powerful features that streamline the translation process.

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**Wordfast** is one of the most common CAT tool. It is known for its flexibility and ease of use, catering to both individual translators and larger teams. It is used by 11.5% of users all over the world.

**MemoQ** is one of the most common CAT tool. It is well regarded for its user friendly interface and powerful features, making it a popular choice among professional translators and agencies. It is used by about 8% of users all over the world.

#### **4.2.2. Drawbacks of CAT Tools**

While CAT tools offer numerous advantages, they also have some drawbacks:

1. Learning Curve: many CAT tools can be complex, requiring time to learn.
2. Cost: Licensing and subscription fees are relatively high.
3. Over-reliance on TM: This can lead to reduced creativity.
4. Performance Issues: Some CAT tools can be slow, especially with large projects.

Such drawbacks should be weighed against the benefits to determine whether a CAT tool is suitable for specific translation needs.

#### **4.2.3. MACHINE TRANSLATION VS. COMPUTER-ASSISTED TRANSLATION**

While both machine translation and computer-assisted translation are tools used in the translation process, they differ significantly in their methodology and application. Unlike MT, CAT tools require human input and oversight throughout the translation process.

The key difference between MT and CAT lies in the level of human involvement: MT is fully automated, while CAT tools are designed to assist, not replace, human translators. MT is suitable for quick, general-purpose translations, while CAT tools provide more control over translation quality and consistency, particularly in professional settings.

### **4.3. AI-powered Tools**

AI tools work by using algorithms to process large amounts of data, which help these tools to learn how to do tasks similar to humans. Top AI tools are: **1. ChatGPT ; 2. Gemini; 3. Jasper.** The study focuses on ChatGPT as one of the most popular AI tool.

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**ChatGPT** is a chatbot and AI tool developed by OpenAI. It helps answer user questions, summarize content or create new text content. It plays a significant role in translation by providing instant access to multilingual support, enhancing communication across cultures, and improving the efficiency of translation processes.

However, it has some drawbacks that will be discussed as follows:

1. **Accuracy Limitations:** It may struggle with complex sentences or technical jargons.
2. **Dependence on Input Quality:** Ambiguity can lead to inaccurate translation.
3. **Lack of Human Touch:** It may not replicate emotional resonance, especially in creative or sensitive texts.
4. **Privacy Concerns:** Using AI for sensitive or confidential information raises concerns about data security and privacy.

#### 4.4. PROS AND CONS OF TRANSLATION TECHNOLOGY

The adoption of translation technologies has brought numerous benefits, but there are also challenges and limitations that need to be considered. Below, we outline the primary advantages and disadvantages of translation technology.

##### 4.4.1. PROS OF TRANSLATION TECHNOLOGY

**Increased Speed and Efficiency:** Translation tools, especially machine translation systems, can produce translations at unprecedented speeds. This is particularly beneficial for large volumes of text or real-time communication, such as live translation during video conferences.

**Cost Reduction:** By automating aspects of the translation process, translation technology can lower the cost of services. For example, MT can provide an initial draft translation at a much lower cost than a human translator, while CAT tools improve translator productivity.

**Consistency:** Translation technology, especially CAT tools with translation memories, ensures that previously translated content is reused, maintaining consistent terminology and style throughout a project.

**Access to Multilingual Content:** MT tools make content in foreign languages more accessible to the global population, helping to bridge communication gaps in contexts like tourism, education, and business.

**Support for Multilingual Teams:** CAT tools often come with cloud-based collaboration features, allowing multiple translators to work together on the same project in real-time.

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#### 4.4.2. CONS OF TRANSLATION TECHNOLOGY

**Quality Issues in MT:** Despite significant advancements, MT tools often struggle with complex sentences, idiomatic expressions, and cultural nuances. As a result, the quality of machine-generated translations can vary, sometimes leading to inaccuracies.

**Loss of Human Creativity and Cultural Context:** Machines lack the human ability to understand cultural subtleties, emotions, and the intended tone of a text, which is especially critical in literary and marketing translations.

**Dependence on Data and Algorithms:** MT systems are only as good as the data and algorithms they are built upon. Poor quality training data or insufficient linguistic models can lead to flawed translations.

**Privacy and Security Concerns:** When using cloud-based MT or CAT tools, there are concerns about data privacy and security, especially when translating sensitive or confidential information.

**Job Displacement:** The increasing use of automated translation tools raises concerns about job displacement for human translators, especially in industries where cost-cutting is a priority.

#### 4.5. CAN AI AND CAT TOOLS SURPASS HUMAN INTELLIGENCE?

As artificial intelligence (AI) technologies continue to evolve, questions arise about whether AI-powered translation tools, such as neural machine translation (NMT), can surpass human intelligence in the domain of translation. While AI has made impressive strides, it is important to recognize that the essence of translation is not only linguistic but also deeply rooted in culture, context, and emotional nuance.

##### 4.5.1. AI LIMITATIONS IN TRANSLATION

**Cultural Sensitivity:** While AI can analyze large amounts of data and learn from context, it still struggles with cultural nuances, humor, and expressions that require human empathy and understanding.

**Creativity and Adaptability:** Human translators can adapt to varying contexts, understanding the deeper meaning of a text, while AI typically relies on patterns and statistical models, making it less capable of creative problem-solving or intuitive decision-making.

**Contextual Understanding:** AI's understanding of a given context is limited to what it has been trained on. It does not possess general knowledge or experience and cannot interpret things like tone, irony, or subtext in the way humans can.



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#### 4.5.2. HUMAN INTELLIGENCE VS. AI IN TRANSLATION

AI, particularly in the form of neural networks, is undoubtedly improving the speed and efficiency of translations. However, human intelligence—especially in terms of critical thinking, emotional intelligence, and cultural awareness—remains irreplaceable. Currently, AI-powered tools are best used as aids to human translators, not as substitutes.

Translation technology, through advancements in machine translation and computer-assisted translation, has transformed the way we approach multilingual communication. While these technologies offer numerous benefits, such as increased speed, reduced costs, and improved consistency, they also present challenges, particularly in terms of quality and cultural nuances. The potential for AI and CAT tools to surpass human intelligence in translation is still far from realization. Human translators will continue to be essential for producing translations that require creativity, empathy, and deep contextual understanding.

As translation technology evolves, it is likely that a hybrid approach—combining the strengths of both human expertise and machine assistance—will become the norm, ensuring that translations are both efficient and culturally accurate.

#### 4.6. Practical Examples from Chat GPT

##### 1. What is the v. form of little?

- It doesn't have a verb form.

Can belittle be the v. form of little?

- Yes, belittle can be considered a v. form related to little. Belittle functions as a verb.

##### 2. What is the verb form of friend?

- The v. form of friend is to friend, meaning to add someone on social media.

Can befriend be the v. form of friend?

- Yes, befriend is the v. form related to friend. It means to make friends with someone.

##### 3. What is the noun form of symbolic?

- The noun form of symbolic is symbolism.

Can symbol be the noun form of symbolic?

- Yes symbol can be considered the n. form of symbolic, while symbolism is the practice or study of symbols.

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**4. What is the verb form of Egypt?**

- There isn't a standard verb as it is a proper noun. However, you might use Egyptionize.

What about Egyptize?

- Egyptise" (or Egyptize" in American English) is indeed a verb, and it refers to the process of adopting or imitating the characteristics, culture, or style associated with Egypt, especially ancient Egypt. It can also refer to the influence of Egyptian culture on something, such as art, architecture, or people. For example, "The building was Egyptionized, when obelisks and hieroglyphs incorporated into the design". In this sense, "Egyptise" or "Egyptize" refers to the act of making something more Egyptian in style or character.

So, why didn't you mention these information?

- You're right, and apologize for the oversight. When you asked about the verb form of Egypt, I should have mentioned Egyptise ( or Egyptize") as the correct term, along with its meaning referring to adopting or imitating Egyptian characteristics. Thank you for pointing that out, and I appreciate your understanding.

**4. What is the British English spelling of connection?**

- The same as American.

Don't you know that it is connexion?

- You are right that connexion was historically used in British English. However, in modern BrE, connection has become standard.

So, why didn't you mention these information when I asked you?

- You're absolutely right to point out that I should have provided more context in my initial response. Thank you for bringing this up! I'll be more thorough in the future.

**What is the British spelling of cipher?**

- There is no difference in the spelling.

Don't you know that it is cypher?

- You are right to point out that cypher is an alternative British spelling of cipher.

**Is destroying a noun or verb?**

- Destroying is a verb. It is the present participle form of destroy.

Is destroying a verbal?

-Yes, “destroying” can be considered a verbal because it functions as a verb form. It can act as a gerund (a noun) or part of a verb tense. For example, in “destroying the old building was necessary”, it acts as a noun.

Can “destroying” be the noun form of destroy?

-Yes, “destroying” can function as a noun when used as a gerund. However, destruction is the more commonly used noun form.

Is it a verbal?

-Yes, because it derives from the verb “destroy” and can function as a noun (gerund) in sentences.

ما هو جمع طريقة؟

طرق أو طرائق

ما مفرد أو اصر؟

"واصر"

-خطأ.

- اعتذر عن الخطأ. مفرد "أواصر" هو "وصر".

- خطأ.

- اعتذر مرة أخرى عن الخطأ. مفرد "أواصر" هو "وصر".

- ماذا عن أصرة؟

- كلمة "أواصر" تعني الروابط أو العلاقات، ومفردتها هو "أصرة" والتي تشير إلى الرابط أو الصلة.

## 5. Conclusion

Translation technology aims to streamline the translation process, improve consistency, reduce costs, and handle large volumes of text quickly.

CAT tools and AI tools can significantly assist human translators. These technologies enhance efficiency, consistency, and accuracy, especially for repetitive tasks and large volumes of text. On the other hand, human translators excel in understanding context, cultural nuances, and idiomatic expressions, which are essential for high-quality translations.

To conclude, the best outcomes often come from a combination of human expertise and technological support. The collaboration between AI and human scholars can

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open new horizons in all fields, especially in the field of translation studies and linguistics. Artificial Intelligence (AI) and CAT tools can save translators' time and effort, but they cannot surpass Human Intelligence.

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